

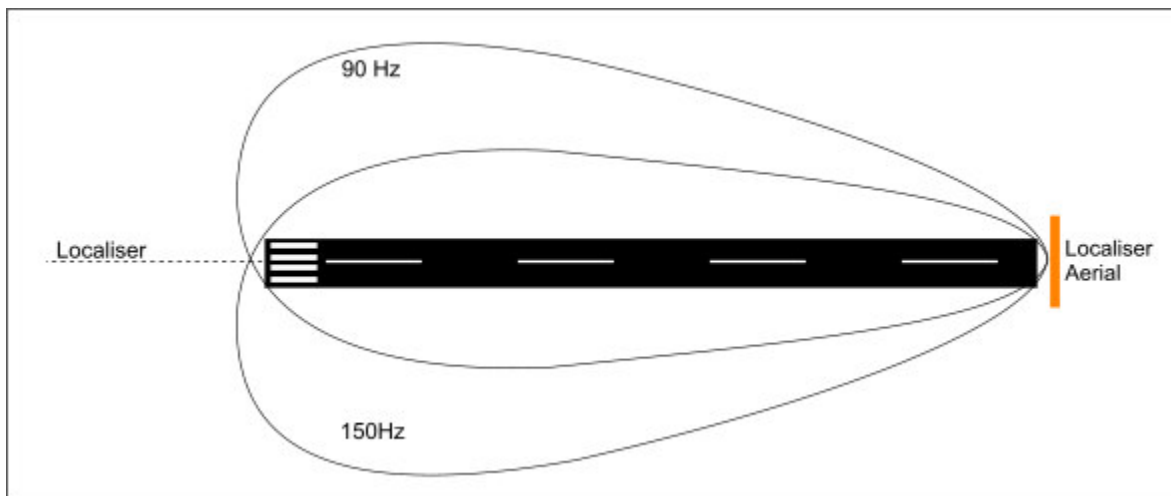
INSTRUMENT LANDING SYSTEM

BASIC HOW IT WORKS

An Instrument Landing System (ILS) comprises several components to facilitate accurate instrument landing of aircraft. The two main ground based components are dealt with here.

1. The Localiser. A device to guide aircraft left or right to the runway centreline.
2. The Glideslope. To guide aircraft descent to accurately approach the runway.

Firstly, the LOCALISER. This uses radio frequencies modulated with tones. The receiver in the aircraft measures the Depth of Modulation between the two tones to guide the aircraft left or right to the runway centreline. The LOCALISER is located at the far end of the runway and is usually a quite visible aerial array.



Secondly, the GLIDESLOPE system uses a similar configuration to the LOCALISER in that again two tones are produced. This time the transmission lobes are arranged vertically rather than horizontally. The receiver on the aircraft measures the Depth of Modulation between the two tones to accurately position the aircraft on the GLIDESLOPE.

